PORTSMOUTH NAVAL SHIPYARD	**)**	**DEPARTMENTAL**
YORK COUNTY	**)**	**FINDINGS OF FACT AND ORDER**
KITTERY, MAINE	**)**	**AIR EMISSION LICENSE**
A-452-70-B-A	**)**	**AMENDMENT #1**

After review of the Part 70 License amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Portsmouth Naval Shipyard (PNS)
LICENSE NUMBER	A-452-70-B-A
LICENSE TYPE	Part 70 License Amendment
NAICS CODE	336611- Ship Building and Repair
NATURE OF BUSINESS	National Security (Submarine Repair for U.S. Navy)
FACILITY LOCATION	Kittery, Maine
DATE OF INITIAL LICENSE ISSUANCE	March 1, 2000
DATE OF AMENDMENT ISSUANCE	April 16, 2003
LICENSE EXPIRATION DATE	March 1, 2005

B. Revision Description

The Portsmouth Naval Shipyard in Kittery, Maine is a repair, retrofit, and general maintenance facility for the U.S. Navy's submarines. The Shipyard is a Part 70 Major Source and operates under current Air Emission License A-452-70-A-I. PNS plans to downsize and modernize its current power plant. The Shipyard proposes to install a 5.5 megawatt (MW) dual fuel-fired turbine and supplemental duct burner, two dual fuel-fired boilers to replace the existing older boilers, and two diesel-fired backup generators to provide power and steam during power outages.

The following emission units were addressed in the Part 70 License, A-452-70-A-I, however, some of the equipment listed will be decommissioned after the proposed changes addressed in this amendment take effect:

EMISSION UNIT ID	LOCATION	UNIT CAPACITY	UNIT TYPE
Furnace/forge	Building 76	5.2 MMBtu/hr	fuel burning equipment
Boiler #2	Building 72	182 MMBtu/hr	fuel burning equipment
Boiler #3	Building 72	158 MMBtu/hr	fuel burning equipment
Boiler #4	Building 72	158 MMBtu/hr	fuel burning equipment
Boiler #5	Building 72	158 MMBtu/hr	fuel burning equipment
Despatch Oven	Building 240	3.1 MMBtu/hr	fuel burning equipment
5 MW Turbine Generator #1	Building 72	59.8 MMBtu/hr (turbine) 47.2 MMBtu/hr (duct burner)	Fuel burning equipment (existing co-generation project)
Air Compressor	Misc buildings/dry docks	2.7 MMBtu/hr	diesel powered process
Air Compressor	Misc buildings/dry docks	2.7 MMBtu/hr	diesel powered process
Air Compressor	Misc buildings/dry docks	2.7 MMBtu/hr	diesel powered process
G20	Dry Dock 1	3.0 MMBtu/hr	backup generator
G21	Dry Dock 2	3.5 MMBtu/hr	backup generator
G22	Dry Dock 2	3.0 MMBtu/hr	backup generator
G25	Dry Dock 3	3.0 MMBtu/hr	backup generator
G37	Building 72	6.0 MMBtu/hr	backup generator
Coating operations	Misc buildings/dry docks	n/a	process equipment
Wood working	Misc buildings/dry docks	n/a	process equipment
Fuel dispensing	n/a	n/a	miscellaneous equipment
Cold cleaning degreasers	Misc buildings/dry docks	3-7 ft^2 (freeboard surface area)	miscellaneous equipment
Radionuclides	Misc buildings/dry docks	1800 CFM & 1200 CFM ventilation systems	miscellaneous equipment

Portsmouth Naval Shipyard has several insignificant activities which do not need to be listed in the emission equipment table above. A list of the insignificant activities and the reasons why the activity is considered insignificant can be found in PNS Title V application pages 5-8 submitted to the Department on 8/27/96.

The following is a list of the proposed equipment to be licensed per this amendment:

EMISSION UNIT ID	LOCATION	UNIT CAPACITY	UNIT TYPE
Boiler #1	Building 72	87 MMBtu/hr	Fuel burning equipment
Boiler #2	Building 72	87 MMBtu/hr	Fuel burning equipment
5.5 MW Turbine Generator #2	Building 72	67.8 MMBtu/hr (turbine) 45.3 MMBtu/hr (duct burner)	Fuel burning equipment (proposed co-generation project)
Diesel Generator #1	Building 72	20 MMBtu/hr	Backup diesel unit
Diesel Generator #2	Building 72	20 MMBtu/hr	Backup diesel unit

C. Application Classification

The modification of a major source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Increase Levels" as given in Maine's Air Regulations.

For the purpose of determining whether a net emissions increase has occurred, the Department allowed the average of the last five years to represent "normal operation". For net emission change at PNS, the average of years 1997 through 2001 will be used to compare with emissions from the proposed project. PNS proposes to ensure that the overall emissions from all sources to be constructed and or modified under this application will fall within the limitations of a minor modification to the existing Part 70 license by limiting the total fuel consumption at the power plant and by limiting fuel use for the combined diesel engines.

The emission increases are determined by subtracting the average actual emissions from the existing boilers preceding the modification from the maximum future license allowed emissions from the proposed new project, as follows:

Pollutant	**1997-2001 Ave. Actual (TPY)**	**Proposed Project's Future License Allowed (TPY)**	**Net Change (TPY)**	**Sig. Level**
PM	18.5	26.1	7.6	25
PM10	18.5	26.1	7.6	15
SO_2	182.0	21.9	-(160.1)	40
NOx	150.3	157.8	7.5	40
CO	22.8	116.9	94.1	100
VOC	2.1	15.8	13.7	40

Therefore, based on the above table, this application is being processed as a minor modification of a Part 70 source, under the requirements of Section 5 (B) of Chapter 140 of the Department's regulations for a Part 70 source. The application does not involve a relaxation or change in monitoring, testing, reporting or recordkeeping requirements. The modification addresses new equipment at a major source and therefore a BACT analysis is required.

D. Applicability Determination

PNS has requested to upgrade its power and steam producing capabilities by replacing existing boilers with new ones and installing a new gas turbine generator. The application specifies the replacement of older shipyard equipment with newer, more efficient equipment. BACT will be applicable for this minor modification.

Department regulations require a comparison of average actual emissions vs. future license allowed. Actual emissions are defined per Chapter 100 as "the actual rate of emissions of a pollutant in tons per year as of a particular date". Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period. For the purpose of determining whether a net emissions increase has occurred, the Department shall use the two (2) year period which precedes the application and which is representative of normal operation. The Department may allow the use of a different period upon a determination that it is more representative of "normal operation". The average actual emissions from PNS existing boilers, turbine generators, and back-up diesel engines are based on a five-year time frame. Because of the year to year variation in heating requirements, the conversion to natural gas, and the installation of a previous turbine and supplemental duct burner/HRSG, an emissions average over a five-year period was determined as more representative of "normal operation". For net emission change at PNS, the average of years 1997 through 2001 were used to compare with emissions from the proposed project.

II. AMENDMENT DESCRIPTION

New Equipment Description

The proposed power and steam generation equipment will consist of a 5.5 MW dual fuel-fired turbine, a 45 MMBtu/hr supplemental duct burner/HRSG, two dual fuel-fired 87 MMBtu/hr boilers, and two 20 MMBtu/hr diesel-fired backup generators. The equipment will burn natural gas, and #2 oil with 0.05% sulfur content as backup fuel and supply steam while the duct burner will provide an additional 45,000 #/hr of steam. The boilers will provide 70,000 #/hr of steam each. The generators will operate as backup for the gas turbines to provide electricity when utility or source-generated service power is unavailable.

The objectives of the project are to downsize and modernize the Power Plant, improve the Power Plant's efficiency, simplify operations, and reduce air emissions. The project will provide PNS with an on-site electrical power source which will result in long term cost savings for the facility. Also, the electricity will be generated by cleaner fuels. The existing boilers #2, #3, #4, and #5 will be shutdown. Boiler #2 will be removed and Boilers #3, #4, and #5 will be abandoned in place. This will result in a reduction in the site's current potential and licensed allowed emissions. The new equipment will have oil backup to provide operational flexibility. Existing fuel oil tanks will be used for all oil-fired equipment.

BACT ANALYSIS

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

Turbine/Duct Burner

Permits for turbines and duct burners approximate in size to the PNS project were evaluated. The most similar project listed in the Clearinghouse is a 5 MW natural gas-fired Solar Taurus turbine and a heat recovery boiler installed at Bucknell University in Pennsylvania. For that project's BACT, the combustion turbine was considered to be low NOx burners and a 25 ppmvd NOx limit, a VOC limit of 25 ppmvd, a CO limit of 50 ppmvd, and good combustion practices. Solar has guaranteed equal or lower emissions on gas for the PNS project.

Sulfur Dioxide (SO_2) BACT

Sulfur dioxide is formed exclusively through the oxidation of sulfur present in the fuel. The Clearinghouse lists clean burn controls and low sulfur fuel as BACT for SO_2 for the turbine and HRSG/duct burner. The PNS project proposes to use natural gas as the primary fuel and very low sulfur #2 oil as the backup fuel.

Because of the fuel's low sulfur content and the annual operation restriction on #2 oil use, no additional SO_2 controls are needed for BACT.

Nitrogen Oxides (NOx) BACT

For the similar size turbines and duct burners, the Clearinghouse lists clean burn controls, dry low NOx combustors including SOLONOx burners, proper turbine design and operation, and fuel injection timing retard.

A BACT cost analysis provided by Solar for SCR was also included. The SCR analysis include equipment cost, ammonia use and cost, catalyst replacement, removal efficiency, and cost per ton of NOx removed. The analysis indicates that the capital cost of the SCR is $877,000, the total annualized cost is estimated at $348,000, and the cost effectiveness is $5,600 per ton of NOx removed, based on 90% removal efficiency. These costs are above the costs associated with BACT. By not using SCR, the storage, handling and emissions of ammonia are avoided.

SCONOx uses an oxidation-absorption-regeneration cycle across multiple, parallel catalyst beds to reduce NOx and CO without ammonia injection. SCONOx is still being field tested on turbines. It is an emerging technology with limited application to date. SCONOx, SNCR, and water injection for the turbine were all considered either technically inferior to other NOx reducing approaches or were ruled out based on economic considerations.

The proposed combustion turbine will be equipped with SOLONOx burners, which are dry low NOx combustors. The duct burner and turbine will be equipped with low NOx burners and have a NOx rate of 0.10 lb/MMBtu each on gas. This is proposed as BACT for NOx reduction.

Particulate (PM) BACT

Particulate emissions from combustion are dependent on fuel sulfur content. The Clearinghouse lists clean burn controls, low sulfur fuel, and the use of gas as BACT for PM for the turbine and duct burner. BACT for the proposed equipment for PM is met through the use of natural gas and very low sulfur fuel oil. No add-on controls are necessary for this project.

Volatile Organic Compounds (VOC) and Carbon Monoxide (CO) BACT

One BACT analysis was presented for CO and VOC emissions because the pollutant formation mechanisms and control techniques are the same. CO is an

intermediate combustion product that forms when oxidation of CO to CO_2 cannot proceed to completion. VOC emissions from combustion engines are primarily a result of incomplete combustion, occurring as a result of inadequate mixing of fuel and air, incorrect air/fuel ratios, or quenching of the combustion products by the combustion chamber surfaces.

Solar also proved a BACT cost estimate for an oxidation catalyst which is attached. The analysis indicates that the capital cost of the oxidation catalyst is $519,000, the total annualized cost is estimated at $242,000, and the cost effectiveness is $6,800 per ton of CO removed, based on 90% removal efficiency. These costs are above the costs associated with BACT. The Clearinghouse lists lean premixed combustion with a CO limit of 13 lb/hr for a turbine, and clean burn controls, the use of gas, and good combustion practices for turbines and duct burners.

BACT for VOC and CO for the proposed equipment is met through good combustion practices, including routine preventative maintenance operations. The vendor's guaranteed concentration of 35 ppmvd for CO and 25 ppmvd for VOC on gas are proposed as BACT for the turbine. The vendor estimated a CO rate of 0.06 lb/MMBtu and a VOC rate of 0.006 lb/MMBtu on gas from the HRSG/duct burner.

Streamlining for Turbine/Duct burner

The turbine project is subject to New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines, for which construction is commenced after October 3, 1977.

40 CFR Part 60, Subpart GG establishes the following emission limits:
Pursuant to 40 CFR Part 60.333 SO_2 is limited to (a) 0.015% by volume @ 15% O_2 on a dry basis or (b) the fuel sulfur content shall not exceed 0.8% by weight.

Pursuant to 40 CFR Part 60.332(a)(2) NO_x is limited based on the following equation:

$$NO_x - STD = 0.015*(14.4/Y) + F,$$

where STD is the allowable NO_x emissions (percent by volume at 15% O_2 and on a dry basis), Y is a function of the manufacturer's rated load (kilojoules per watt hour), and F is a function of the fuel-bound nitrogen.

The NSPS, for turbines less than 100 MMBtu/hr capacity, establishes a nominal NOx emission limit for PNS of 150 ppmdv at 100% load. Subpart GG also limits the fuel sulfur content to no more than 0.8% by weight. While the NSPS does apply, the proposed BACT is substantially more stringent; compliance with BACT will insure compliance with the NSPS emission limits.

New Boilers

Permits for boilers approximate in size to PNS project boilers, each rated at 87 MMBtu/hr, were evaluated. Gas and oil-fired entries were reviewed. The new boilers and duct burner are subject to 40 CFR Part 60 Subpart Dc, "Standards of Performance for Small Industrial-Commercial Steam Generating Units". This subpart applies to steam generating units constructed after June 1989 with a maximum heat input between 10 and 100 MMBtu/hr.

Sulfur Dioxide (SO_2) BACT

The Clearinghouse lists low sulfur fuel for this size boiler as BACT. A top down analysis is not applicable for SO_2 emissions as the only control technique identified for SO_2 emissions in the Clearinghouse is the combustion of low sulfur fuels. The Project proposes to use natural gas as the primary fuel and very low sulfur #2 oil as the secondary fuel for the boilers. Because of the fuel's low sulfur content, and the annual operating restriction on #2 oil use, no additional SO_2 controls were considered.

PNS shall meet the Compliance and Performance Test Methods, Emissions Monitoring, and Reporting and Recordkeeping requirements for Sulfur Dioxide as specified in 40 CFR Part 60 Subpart Dc.

Nitrogen Oxides (NOx) BACT

The Clearinghouse lists combustion modification such as low NOx burners, flue gas recirculation (FGR), dry low NOx burners with FGR, limited use on oil, and SCR as BACT for NOx.

The SCR analysis includes the equipment cost, ammonia use and cost, catalyst replacement, removal efficiency, and cost per ton of NOx removed. The analysis indicates that the capital cost of the SCR including installation is $1,358,000, the annualized cost is estimated at $ 376,100, and the cost effectiveness is $15,900 per ton of NOx removed. These costs are above the costs associated with BACT, therefore SCR technology will not be part of PNS project.

Reburn involves staging combustion by a second elevation of burners. Packaged boilers of this size do not have the vertical space or furnace volume for the addition of a second burner. Reburn was not listed in the Clearinghouse for this size boiler, and was not considered further.

The proposed boilers will be equipped with low NOx burners and flue gas recirculation (FGR). FGR reduces NOx due to the oxygen dilution effects associated with substitution of lower oxygen exhaust gas for fresh combustion air. It also reduces the peak flame temperature which reduces NOx. At recirculation rates greater than 25%, flame instability occurs. The combination of low NOx burners and FGR will control NOx emissions from an uncontrolled baseline by about 60%, based on AP-42 factors. Also, annual operation on #2 oil will be restricted. The existing boilers that the proposed equipment is replacing have a NOx rate on #2 oil of 0.3 lb/MMBtu, based on AP-42 factors. The new boilers will have a NOx rate on gas of 0.10 lb/MMBtu.

Particulate Matter (PM) BACT

The Clearinghouse lists proper combustion practices and the use of low sulfur fuels as BACT for PM. The proposed boilers will operate under these conditions, therefore BACT for PM is met through the use of natural gas and very low sulfur fuel oil.

PNS shall meet the Compliance and Performance Test Methods, Emissions Monitoring, and Reporting and Recordkeeping requirements for Particulate Matter as specified in 40 CFR Part 60 Subpart Dc.

Volatile Oraganic Compounds (VOC) and Carbon Monoxide (CO) BACT

The Clearinghouse lists good combustion practices and an oxidation catalyst for boilers of this size as BACT for CO and VOC.

CO and VOC are formed as a result of incomplete combustion of fuel. Combustion control of CO and VOC is accomplished by providing adequate fuel residence time and high temperature in the combustion zone to ensure complete combustion. These control factors tend, however, to create higher NOx emissions. Conversely, flame temperature control to reduce NOx emissions tend to create higher CO emissions. Flame temperature reduction must be set to achieve the lowest NOx and CO emissions.

The proposed boilers will achieve similar CO concentrations as compared to boilers with oxidation catalyst described in the Clearinghouse. BACT for VOC and CO for the proposed equipment is met through good combustion practices. A catalyst life is not indefinite and would require disposal and purchase of a new catalyst, or regeneration of the existing catalyst. Sulfur, chlorine, phosphates, and particulates can poison a catalyst. CO and VOC reduction can be achieved through good combustion practices without any adverse economic, energy, or environmental impacts.

Streamlining for Boilers

Opacity

PNS accepts streamlining for opacity requirements. 40 CFR Part 60, Subpart Dc, Chapter 101 Section 2(A)(1) of the Department's regulations, and Best Available Control Technology (BACT) requirements are applicable. The NSPS opacity limit is most stringent. Therefore, only the more stringent NSPS opacity limit is included in this license.

Particulate Matter

PNS accepts streamlining for the particulate matter emission limit requirement. 40 CFR Part 60, Subpart Dc, Chapter 103 of the Department's regulations, and BACT requirements are applicable. NSPS states that the opacity must be less than 20% on a six minute block average, except for one 6-minute period per hour of not more than 27 percent opacity. With the primary use of natural gas, and the very low sulfur oil as a backup fuel, opacity is expected to be less than the standard. The BACT particulate matter limit and visible emission limit are at least as stringent. Therefore, only the BACT limits are included in this license.

Sulfur Dioxide

PNS accepts streamlining for the sulfur dioxide emission limit requirement. 40 CFR Part 60, Subpart Dc, Chapter 106 of the Department's regulations, and BACT requirements are applicable. NSPS specifies that SO_2 emissions must be less than 0.5 lb/MMBtu, or fuel with sulfur content less than 0.5% must be used. The fuel sulfur content of 0.05% to be used by the new equipment meets this standard. The BACT sulfur content limit is more stringent. Therefore, only the more stringent sulfur content limit is included in this license.

Backup Generators

The fuel usage for the combined backup generators will be limited to 166,175 gallons/year based on a 12-month rolling total. This will limit NOx emissions to

less than twenty tons per year. BACT is met through good combustion practices, computerized controls, and maintaining a log to demonstrate compliance with the annual fuel limit for the combined generators. PNS shall limit the sulfur content of the #2 fuel oil to less than 0.05% by weight. Fuel receipts shall be kept to demonstrate compliance with the sulfur content and fuel usage limits. A more detailed BACT determination can be found in PNS's application dated November 19, 2002.

Facility Emissions and Fuel Use Cap

Based on allowable fuel use in the combustion sources and allowable emissions from the processes at PNS, total facility emissions shall be limited to the following:

Total Allowable Annual Emissions for the Facility *
(used to calculate the annual license fee)

Equipment	PM	PM_{10}	SO_2	NO_X	CO	VOC
Small boilers (<10 MMBtu/hr)	4.7	4.7	18.4	13.6	1.3	0.3
Compressors	10.7	10.7	10.0	153	33	12.2
Back-up generators	1.4	1.4	1.3	20	4.3	1.6
New diesel units	0.5	0.5	0.6	19.7	1.3	0.5
Turbine generator #1 and Duct Burner	8.3	8.3	2.7	37.9	28.4	1.5
Turbine generator #2 and Duct Burner	8.9	8.9	7.6	69.2	39.7	11.2
New Boilers	8.3	8.3	11.1	29.6	46.3	2.4
Process VOC emissions	--	--	--	--	--	48
TOTALS	**42.8**	**42.8**	**51.7**	**343**	**154.3**	**76.2**

* The total ton per year emissions along with the corresponding annual license fee takes effect only after the completion of the proposed project as described in the Finding of Fact section of this Air Emission License Amendment, A-452-70-B-A.

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 140 (13)(C), an air quality impact analysis is not required for a minor modification if an impact analysis was previously submitted and the minor modification has emissions less than the following:

Pollutant	Tons/Year
PM	25
PM_{10}	25
SO_2	50
NO_x	100
CO	250
Lead	0.6

Based on the information available in the file and the fact that emissions increases from the proposed project are below the above limits, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source. Therefore, a modeling analysis and/or monitoring for this source are not required at this time.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

During the drafting and subsequent issuance of the shipyard's initial Part 70 Air Emission License, A-452-70-A-I, the Department included several conditions that met two operating scenarios. At the time, PNS was undergoing a major repowering construction project that was in various stages of completion. A construction schedule was a condition of the initial Part 70 air emissions license, however, the license required conditions for both scenarios, before and after the conversion project was complete. The existing boilers could combust #6 fuel oil and after boiler conversion operate with natural gas and #2 fuel oil as back up. The initial Part 70 air emission license, issued March 1, 2000, included conditions for both operating scenarios.

To simplify PNS's air emission license, this amendment shall encompass all conditions that apply to the Shipyard after the completion of the new project. The conditions of Air Emission License A-452-70-A-I that haven't changed as a result of this amendment are included in this amendment. However, all conditions in the current air emission license, A-452-70-A-I, that will change as a result of this

project are still enforceable until this project as stated in this amendment is complete. This includes, but is not limited to, all conditions pertaining to the existing boilers that plan to be decommissioned. PNS shall notify the Department when the project is complete within 10 days.

The Department hereby grants the Part 70 License Amendment A-452-70-B-A pursuant to MEDEP Chapter 140 and subject to the standard and special conditions below.

Standard Statements

(1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.

(4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;

(5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

(a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

(b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated July 16, 1996.

Standard	**Program:**	**Reason Why Not Applicable to the Portsmouth Naval Shipyard**
National Emission Standards for Hazardous Air Pollutants 40 CFR Part 61	Subpart V. Equipment Leaks (Fugitive Emission Sources)	Subpart is applicable to pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, flanges, and other connectors, vessels, and control devices that operate in volatile hazardous air pollutant (VOHAP) service. VOHAP includes only Benzene and Vinyl Chloride. No equipment using benzene or vinyl chloride is in service at PNS.
Standards of Performance for New Stationary Sources 40 CFR Part 60	Subpart D Fossil Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971	Applicable to fossil fuel fired steam generating units with maximum heat input rates greater than 250 MMBtu/hr. Portsmouth Naval Shipyard has no boilers with a total heat input of 250 MMBtu/hr. Therefore, the standard is not applicable.
	Subpart Da Electric Utility Steam Generation Units for Which Construction is Commenced After September 18, 1978	No affected units or facilities.

	Subpart Db Industrial-Commercial Steam Generating Units	Applicable to steam generating units that commenced Construction, modification, or reconstruction after June 19, 1984 with maximum heat input rates greater than 100 MMBtu/hr. All PNS boilers were manufactured and installed prior to this date. The conversion project does not meet the modification/reconstruction definition.
Standards of Performance for New Stationary Sources 40 CFR Part 60	Subpart K Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	No affected units or facilities. Definition of petroleum liquids exempts #2 and #6 fuel oils.
Standards of Performance for New Stationary Sources 40 CFR Part 60 (continued…)	Subpart Ka Storage Vessels for Petroleum Liquid for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	No affected units or facilities. Definition of petroleum liquids exempts #2 and #6 fuel oils.
	Subpart Kb Storage Vessels for Volatile Organic Liquids for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Applicable to Volatile Organic Liquid storage tanks with a capacity greater than or equal to 40 cubic meters (10,567 gal) that were constructed, modified or reconstructed after July 23, 1984. PNS does not have any tanks constructed after 7/23/84. Standard is not applicable.
National Emission Standards for Hazardous Air Pollutants 40 CFR Part 63	Subpart II Shipbuilding and ship repair (surface coating) facilities which are major sources of HAPs are required to control emissions using the maximum achievable control technology (MACT).	PNS is not a major source of HAPs. The facility has total potential HAP emissions of approximately 13 tpy and all individual potential HAP emissions are below the 10 tpy threshold.

***Section Title*/Description (State Regulations)**	**Comment**
(Chapter 104) Incinerator Particulate Emission Standard This regulation establishes a limitation on the amount of particulate matter allowed to be emitted from each of several categories and sizes of incinerators and a limitation on the opacity of emissions from all incinerators.	Portsmouth Naval Shipyard has no incinerators and is therefore not applicable to this regulation.

(Chapter 111). Petroleum Liquid Storage Vapor Control This regulation requires all owners of fixed roof storage tanks with capacities greater than 39,000 gallons, storing gasoline, crude oil or any petroleum liquid whose vapor pressure is greater than 1.0 psia to install floating roofs to reduce the hydrocarbon vapors lost to the atmosphere.	Portsmouth Naval Shipyard does not have any volatile petroleum liquids with vapor pressure greater than 1.0 psia stored in fixed roof storage vessels with capacities greater than 39,000 gallons.
(Chapter 112). Bulk Terminal Petroleum Liquid Transfer Requirements This regulation requires bulk gasoline terminals loading tank trucks or trailers and who dispense 20,000 gallons or more of gasoline per day to install a vapor control system and requires tank truck tightness certification. This system must control gasoline vapors so that not more than 35 milligrams of vapor escapes for each liter of gasoline transferred.	*Bulk gasoline terminal* means a gasoline storage facility which receives gasoline from refineries...and delivers gasoline to bulk gasoline plants...and has a daily throughput of more than 20,000 gallons of gasoline." [Chapter 100 (22)]. PNS is not a bulk gasoline terminal and is therefore not applicable.

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

(a) Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;

(b) Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;

(c) The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or

(d) The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether

cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

(8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.

Standard Conditions

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (Title 38 MRSA §347-C);

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;

(3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request;
Enforceable by State-only

(4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.

(5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions;
Enforceable by State-only

(6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the

Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;

(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.

(8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

(a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:

(i) within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

(ii) to demonstrate compliance with the applicable emission standards; or

(iii) pursuant to any other requirement of this license to perform stack testing.

(b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

(c) submit a written report to the Department within thirty (30) days from date of test completion.

Enforceable by State-only

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

(a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

(b) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

(c) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

Enforceable by State-only

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

a. The licensee shall notify the Commissioner within 48 hours of a violation in emission standards and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

b. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRSA § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has

taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

c. All other deviations shall be reported to the Department in the facility's semiannual report.

(11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

(12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.

(13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

(a) The identification of each term or condition of the Part 70 license that is the basis of the certification;

(b) The compliance status;

(c) Whether compliance was continuous or intermittent;

(d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and

(e) Such other facts as the Department may require to determine the compliance status of the source;

SPECIAL CONDITIONS

(14) Portsmouth Naval Shipyard plans to implement a project to downsize and modernize

the Power Plant. The existing Boilers #2, #3, #4, and #5 will be removed from service and replaced. After the project is complete, PNS will be licensed to operate the following boilers:

EMISSION UNIT ID	LOCATION	UNIT CAPACITY
Boiler #1	Building 72	87 MMBtu/hr
Boiler #2	Building 72	87 MMBtu/hr

[MEDEP Chapter 140, BPT]

(15) After the repowering project is complete, PNS will limit Boilers #1 and #2 emissions to the following when firing natural gas:

Pollutant	lb/MMBtu	Boilers #1 and #2 (lb/hr) each
PM	0.05	4.4
PM_{10}	--	4.4
SO_2	--	0.1
NO_X	0.10 (natural gas)	8.7
CO	--	6.5
VOC	--	0.4

PNS shall be limited to the following short-term emission limits when firing #2 fuel oil as back-up:

Pollutant	lb/MMBtu	Boilers #1 and #2 (lb/hr) each
PM	0.08	7.0
PM_{10}	--	7.0
SO_2	--	8.7
NO_X	0.20 (oil back-up)	17.4
CO	--	8.7
VOC	--	0.9

[MEDEP Chapter 140, BPT]

(16) PNS shall perform NOx and particulate stack testing after the installation of each boiler in accordance with 40 CFR Part 60 or other methods approved or required by the Department to demonstrate their ability to meet NOx and particulate limits shown in Condition #15. The NOx stack testing shall be done on for both fuels, when operating with natural gas and when operating with #2 fuel oil, however, the

particulate stack test can be done when operating with #2 fuel oil only. A follow-up NOx emission stack test, shall be performed within one year after the initial stack test is completed. [MEDEP Chapter 140, BPT]

(17) PNS shall operate each boiler such that the visible emissions do not exceed an opacity of 20% on a six (6) minute block average basis, except for one 6-minute period per hour of not more than 27% opacity, demonstrated in accordance with 40 CFR Part 60, Appendix A, Method 9. Based on the type of fuel for which the boilers will be designed and when operating in a manner consistent with good air pollution control practices, it is unlikely the boilers will exceed the opacity limits. Therefore, initial and periodic monitoring by the source for opacity in the form of visible emission testing in accordance with 40 CFR Part 60, Appendix A, Method 9 is not required at this time.
[40 CFR Part 60 Subpart Dc]

(18) Boilers #1 and #2 shall comply with all operating and documentation requirements of 40 CFR Part 60 Subpart Dc (NSPS). When using #2 fuel oil, PNS shall maintain records of monthly #2 fuel use indicating the quantity of fuel consumed and the percent (%) sulfur content of the fuel. Whenever SO_2 compliance emission testing is required, US EPA Method 6 shall be used to demonstrate compliance. [40 CFR Part 60 Subpart Dc] & [MEDEP Chapter 140, BPT]

The following conditions pertain to the proposed 5.5 MW natural gas turbine generator project with oil back-up

(19) PNS is proposing a co-generation project that will consist of a 5.5 megawatt (MW) natural gas-fired turbine, with #2 oil back-up and with supplemental duct burning. BACT for the combustion turbine is low NOx burners for NOx control, good combustion practices for CO and emission rate limits for PM and VOC. PNS shall meet the following requirements for the proposed 5.5 MW natural gas fired turbine generator with a heat recovery steam generator and supplemental duct burner:

When firing natural gas, the combustion turbine #2 shall meet the following limits:

Pollutant	Load	ppmdv	lb/MMBtu	lb/hr
PM	All	--	0.02	1.3
PM_{10}	All	--	--	1.3
SO_2	All	--	--	0.23
NOx	All	25 (corrected to 15% O_2)	0.10	6.7
CO	All	--	--	5.7
VOC	All	--	--	2.4

When firing natural gas, the duct burner shall not exceed the following emission limits:

Pollutant	Load	ppmdv	lb/MMBtu	lb/hr
PM	All	--	0.02	0.9
PM_{10}	All	--	--	0.9
SO_2	All	--	--	0.1
NOx	All	25 (corrected to 15% O_2)	0.10	4.5
CO	All	--	--	2.7
VOC	All	--	--	0.3

When firing #2 oil, the combustion turbine #2 shall meet the following limits:

Pollutant	ppmdv	lb/MMBtu	lb/hr
PM	--	0.08	5.0
PM_{10}	--	--	5.0
SO_2	--	--	3.2
NOx	96 (corrected to 15% O_2)	0.40	25.2
CO	--	--	8.0
VOC	--	--	2.3

When firing #2 oil, the duct burner shall not exceed the following emission limits:

Pollutant	lb/MMBtu	lb/hr
PM	0.12	5.4
PM_{10}	--	5.4
SO_2	--	2.3
NOx	0.20	8.8
CO	--	4.4
VOC	--	0.5

[MEDEP Chapter 140, BPT]

(20) Exhaust from the proposed 5.5 MW turbine generator shall vent through a 167 foot above ground stack. Visible emissions from the turbine shall not exceed 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block averages in a 3-hour period, demonstrated in accordance with 40 CFR Part 60, Appendix A, Method 9. [MEDEP Chapter 140, BPT]

(21) PNS shall perform NOx stack testing, within one year, after the installation of the turbine project in accordance with 40 CFR Part 60 or other methods approved or required by the Department to demonstrate their ability to meet the lb/MMBtu

NOx limit shown in Condition #19. A follow-up NOx emission stack test shall be performed within one year after the initial stack test is completed.
[MEDEP Chapter 140, BPT]

(22) For the new project, including the new boilers and turbine generator with duct burner, PNS shall not exceed a maximum firing of 2.26 billion cubic feet of natural gas and 4,893,800 gallons of #2 fuel oil, with a maximum sulfur content of 0.05% by weight, per year based on a 12 month rolling total.
[MEDEP Chapter 140, BPT]

The following conditions pertain to the proposed backup generators

(23) The two proposed backup generators for the Shipyard's project shall comply with each of the following: [MEDEP Chapter 140, BPT]

A. PNS shall limit total fuel consumption to less than 166,175 gallons per year based on a 12-month rolling total.

B. PNS shall keep a log documenting the date and time of generator start-up and shutdown.

C. Documentation on the length of each run of the generators shall be kept by PNS through the use of an hour meter.

D. The backup generators shall fire only #2 fuel oil with a sulfur content not to exceed 0.05% by weight. Compliance can be demonstrated through fuel receipts.

E. Emissions from each of the generators shall not exceed the following:

Pollutant	lb/MMBtu (each)	lb/hr (each)
PM	0.12	0.7
PM10	-	0.7
SO_2	-	1.0
NOx	-	34.3
CO	-	2.2
VOC	-	0.8

F. Visible emissions from the generators shall not exceed 20% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in a 3-hour period.

(24) Total emissions from the proposed project (including the two new boilers, turbine generator, duct burner, and new backup diesel generators) are limited to the following:

Pollutant	Emissions (tons per year)
Particulate Matter	17.5
PM10	17.5
Sulfur Dioxide	19.1
Nitrogen Oxides	118.4
Carbon Monoxide	87.5
VOC	14.2

PNS shall submit the method of calculations, to determine the tons per year emissions, from the proposed project to the Department for approval within six months after start-up.

The following conditions are from the initial Part 70 Air Emission License A-452-70-A-I. Some of the existing conditions have been updated due to the proposed new project.

Conditions #25, #26, #27 pertain to the existing 5 MW natural gas turbine generator #1

(25) PNS currently operates a co-generation project that consists of a 5 megawatt (MW) natural gas-fired turbine with supplemental duct burning. BACT for the combustion turbine is low NOx burners for NOx control, good combustion practices for CO and emission rate limits for PM and VOC. [MEDEP Chapter 140, BPT]

(26) PNS shall meet the following requirements for the 5 MW natural gas fired turbine generator #1 with a heat recovery steam generator and supplemental duct burner:

The natural gas-fired combustion turbine shall meet the following limits:

Pollutant	Load	ppmdv	lb/MMBtu	lb/hr
PM	All	--	0.02	1.3
PM_{10}	All	--	--	1.3
SO_2	All	--	--	0.4
NOx	All	25 (corrected to 15% O_2)	0.10	6.7
CO	All	--	--	3.8
VOC	All	--	--	0.2

The natural gas-fired duct burner shall not exceed the following emission limits:

Pollutant	Load	ppmdv	lb/MMBtu	lb/hr
PM	All	--	0.02	1.0
PM_{10}	All	--	--	1.0
SO_2	All	--	--	0.1
NOx	All	25 (corrected to 15% O_2)	0.10	4.7
CO	All	--	--	3.8
VOC	All	--	--	0.2

[MEDEP Chapter 140, BPT]

(27) Exhaust from the 5 MW turbine generator #1 shall vent through a 167 foot above ground stack. Visible emissions from the turbine shall not exceed 10% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period, demonstrated in accordance with 40 CFR Part 60, Appendix A, Method 9. [MEDEP Chapter 140, BPT]

The following conditions pertain to PNS regardless of the proposed project.

(28) PNS is subject to the following requirements in order to minimize VOC emissions from painting and coating operations.

The total non-exempt fugitive VOC emissions (not including VOC emissions from degreasing operations) from the Portsmouth Naval Shipyard shall not exceed 48 tons per year based on a 12 month rolling total updated monthly and shall not exceed 15 tons during any one calendar month, where:

i. the first 12 months rolling total shall end on December 31, 1996;
ii. the pounds of VOC emissions are calculated using the PNS Hazardous Substance Management System (HSMS). The tracking system HSMS is described in Enclosure (1) of the July 11, 1997 submittal. The HSMS is used to track all hazardous material and VOC and HAP emissions. PNS may create an equivalent system, approved by the Department, to track VOC and HAP emissions.
iii. The HSMS shall provide what coatings are used and actual emissions. The system shall provide a demonstration that the gallons of specific coating used multiplied by the actual VOC content is less than the allowable emissions. Allowable emissions are determined by the gallons of coating used multiplied by the RACT emission limits. [MEDEP Chapter 140, BPT]

(29) PNS shall use the HSMS tracking system, or equivalent system approved by the Department, as noted above. PNS shall meet the following Volatile Organic HAP (VOHAP) limits for Marine Coatings:

Coating Categories	**Grams/liter coating (minus water and exempt compounds)**	**Grams/liter solids temp ≥ 4.5°C**	**Grams/liter solids temp < 4.5°C**
General Use	340	571	728
Specialty Air Flask	340	571	728
Antenna	530	1,439	
Antifoulant	400	765	971
Heat resistant	420	841	1,069
High-gloss	420	841	1,069
High-temperature	500	1,237	1,597
Inorganic zinc high build	340	571	728
Military exterior	340	571	728
Mist	610	2,235	---
Navigational aids	550	1,597	---
Nonskid	340	571	728
Nuclear	420	841	1,069
Organic zinc	360	630	802
Pretreatment wash primer	780	11,095	---
Repair and maint. of thermoplastics	550	1,597	---
Rubber camouflage	340	571	728
Sealant for thermal spray aluminum	610	2,235	---
Special marking	490	1.178	---
Specialty interior	340	571	728
Tack coat	610	2,235	---
Undersea weapons systems	340	571	728
Weld-through precon. primer	650	2,885	---

PNS may use up to fifty gallons of any combination of coatings which exceed the VOC emission limitation of the above table during any twelve consecutive month period.

In the event that small amounts of specialty coating with a higher VOC content is needed, then emissions averaging over a 30 day period will be allowed to provide flexibility. When using the emissions averaging, PNS must show compliance by actual daily emissions averaged over the 30-day period. [MEDEP Chapter 140, BPT]

(30) PNS, for the purpose of demonstrating ongoing non-applicability to the Shipbuilding MACT and ongoing compliance with VOC RACT requirements, shall continue to

track HAP and VOC use and report the results to the MEDEP annually as is currently required under Chapter 137. PNS shall limit total HAP emissions to less than 25 tons per year and shall limit any individual HAP to less than 10 tons per year.
[MEDEP Chapter 140, BPT]

(31) PNS shall maintain "Good Housekeeping" practices, including but not limited to: careful application of aerosol spray materials, sealing of VOC material containers to reduce evaporative loss, proper personnel training in the use of VOC application equipment and clean-up activities, and proper handling of all VOC containing materials in a manner to minimize the likelihood of spills.
[MEDEP Chapter 130, BPT]

(32) **Degreaser Parts Washer**

The parts washers are subject to the operational and record keeping requirements of MEDEP Chapter 130 which include, but are not limited to, the following:

A. PNS shall keep records of the amount of solvent added to each parts washer.
B. PNS shall attach a permanent conspicuous label to each unit summarizing the following operational standards of Chapter 130:
    1. Equip each cold cleaning degreaser with a cover that is easily operated with one hand if:
        a. the solvent vapor pressure is greater than 15 millimeters of mercury measured at 100 ^{o}F by ASTM D323-89; or,
        b. the solvent is agitated; or,
        c. the solvent is heated.
    2. Close the covers on all solvent degreasing tanks when the tanks are not in use;
    3. Drain the cleaned parts for at least fifteen (15) seconds or until dripping stops;
    4. If used, supply a solvent spray that is a solid fluid stream (not a fine, atomized or shower-type spray) at a pressure that does not exceed ten (10) pounds per square inch gauge pressure (psig);
    5. Do not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
    6. Minimize drafts to less than 40 meters/minute;
    7. Refrain from operating the cold cleaning degreaser upon the occurrence of any visible solvent leak until such leak is repaired; and
    8. Do not use any halogenated solvents in the degreasing tanks.

(33) Open abrasive blasting and spray painting (except aerosol spray can painting) are not allowed. These operations shall take place in containment such as removable submarine covers, sandblast booths, paint booths, etc. Emissions from sandblast booths or paint booths shall vent through bag houses or air filters and shall be

limited to 10% opacity on a six minute block average. The bag houses and air filters at PNS must be used to control PM emissions and operate properly at all times abrasive blasting or painting is being performed. To ensure proper baghouse collection efficiency, a gauge will be used to monitor the pressure drop across the bags and be maintained between manufacturer's specifications. The air filters do not have pressure drop readings.

PNS will develop an inspection checklist for bag houses and air filters. The facility shall perform a weekly inspection of bag houses and air filters in continuous use to ensure there are no broken, torn, or clogged bags or filters that would allow excess emissions. The weekly inspections of the bag houses and air filters are required only when they are in use. Depending on workload, there are periods when some bag houses or air filters are not used for several weeks or months. Bag houses or air filters have not been in use for more than one week shall be inspected upon startup.

- i Whenever compliance testing is required, USEPA Method 9, shall be used. When approved in writing an equivalent test method may be substituted for the required test method.

- ii PNS shall install, operate, calibrate and maintain a pressure drop monitor at the baghouse.

-iii PNS shall maintain the following records:
  a) A log of the name or initials of the operator performing each weekly baghouse inspection and the time each inspection took place.
  b) A description of any maintenance or repairs of the baghouse that resulted from the inspection.

[MEDEP Chapter 140, BPT] **Enforceable by State-Only**

(34) PNS shall ensure that all rented diesel compressors comply with current air emission standards. The sulfur content of all diesel fuel used by PNS shall not exceed 0.05% by weight. The diesels that operate the cranes meet RACT by their current configuration, maintenance schedule, and operation. All other stationary reciprocating engines are considered backup/standby sources and are limited in operation by fuel use. The backup generators' fuel use shall be recorded. Generator units less than 0.5 MMBtu/hr are considered insignificant per Chapter 140 Appendix B Section B and therefore do not need to be included.
[MEDEP Chapter 140, BPT]

(35) **Gasoline Storage Tank**

A. The fill pipe shall extend within 6 inches of the bottom of the gasoline storage tank. [MEDEP Chapter 118]

B. The licensee shall maintain records of the monthly and annual throughput of gasoline. [MEDEP Chapter 118]

(36) Insignificant Activities

Once during each semi-annual reporting period, the licensee shall inspect and determine whether the categorically insignificant activities are in compliance with all applicable requirements. The licensee shall record in a log the results of this inspection.
[MEDEP Chapter 140, BPT]

(37) For Compliance Assurance, PNS shall comply with the following:

The Bureau of Air Quality finds the following Compliance Assurance Plan to be reasonable and appropriate.

Record-Keeping

For all of the equipment parameter monitoring and recording, required by this license, the licensee shall maintain records of the most current six year period and the records shall include a complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Bureau of Air Quality upon request.
[MEDEP Chapter 140, BPT]

(38) **Semiannual Reporting**

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due July 30th and January 30th of each year.

A. Each semiannual report shall include a summary of the periodic monitoring required by this license.

B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.
[MEDEP Chapter 140]

(39) **Annual Compliance Certification**

The licensee shall submit an annual compliance certification to the Department in accordance with Condition (13) of this license. The annual compliance

certification is due Jan 30th of each year. The annual compliance certification shall be submitted with the second semiannual report.
[MEDEP Chapter 140]

(40) **Annual Emission Statement**
The licensee shall annually report to the Department, in a specified format, fuel use, operating rates, use of materials and other information necessary to accurately update the State's emission inventory. [MEDEP Chapter 137]

(41) The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
Chapter 102	Open Burning	-
Chapter 109	Emergency Episode Regulation	-
Chapter 110	Ambient Air Quality Standard	-
Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. §585-B, sub-§5	Mercury Emission Limit	Enforceable by State-only

(42) **Units Containing Ozone Depleting Substances**
When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs.
[40 CFR, Part 82, Subpart F]

(43) Asbestos Abatement

When undertaking Asbestos abatement activities, PNS shall comply with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M.

(44) The licensee is subject to all applicable requirements of 40 CFR Part 68 (Risk Management Plan).

(45) **Certification by a Responsible Official**
All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [MEDEP Chapter 140]

(46) PNS shall pay the annual air emission license fee within 30 days of August 30th of each year. Pursuant to Title 38-353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under section 341-D, subsection 3.

(47) This amendment shall expire concurrently with Air Emission License A-452-70-A-I.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAHGER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES
Date of initial receipt of application: November 26, 2002
Date of application acceptance: December 9, 2002

Date filed with the Board of Environmental Protection _____

This Order prepared by Edwin Cousins, Bureau of Air Quality.